



# FIG.1A

## Amino Acid Sequence of the Composite HCV<sub>HC-J1/CDC/CHI</sub>

					5						10						16
1	Met	Ser	Thr	Ile	Pro	Lys	Pro	Gln	Arg	Lys	Thr	Lys	Arg	Asn	Thr	Asn	
17	Arg	Arg	Pro	Gln	Asp	Val	Lys	Phe	Pro	Gly	Gly	Gly	Gln	Ile	Val	Gly	
33	Gly	Val	Tyr	Leu	Leu	Pro	Arg	Arg	Gly	Pro	Arg	Leu	Gly	Val	Arg	Ala	
49	Thr	Arg	Lys	Thr	Ser	Glu	Arg	Ser	Gln	Pro	Arg	Gly	Arg	Arg	Gln	Pro	
65	Ile	Pro	Lys	Val	Arg	Arg	Pro	Glu	Gly	Arg	Thr	Trp	Ala	Gln	Pro	Gly	
81	Tyr	Pro	Trp	Pro	Leu	Tyr	Gly	Asn	Glu	Gly	Cys	Gly	Trp	Ala	Gly	Trp	
97	Leu	Leu	Ser	Pro	Arg	Gly	Ser	Arg	Pro	Ser	Trp	Gly	Pro	Thr	Asp	Pro	
113	Arg	Arg	Arg	Ser	Arg	Asn	Leu	Gly	Lys	Val	Ile	Asp	Thr	Leu	Thr	Cys	
129	Gly	Phe	Ala	Asp	Leu	Met	Gly	Tyr	Ile	Pro	Leu	Val	Gly	Ala	Pro	Leu	
145	Gly	Gly	Ala	Ala	Arg	Ala	Leu	Ala	His	Gly	Val	Arg	Val	Leu	Glu	Asp	
161	Gly	Val	Asn	Tyr	Ala	Thr	Gly	Asn	Leu	Pro	Gly	Cys	Ser	Phe	Ser	Ile	
177	Phe	Leu	Leu	Ala	Leu	Leu	Ser	Cys	Leu	Thr	Val	Pro	Ala	Ser	Ala	Tyr	
193	Gln	Val	Arg	Asn	Ser	Thr	Gly	Leu	Tyr	His	Val	Thr	Asn	Asp	Cys	Pro	
209	Asn	Ser	Ser	Ile	Val	Tyr	Glu	Ala	His	Asp	Ala	Ile	Leu	His	Thr	Pro	
225	Gly	Cys	Val	Pro	Cys	Val	Arg	Glu	Gly	Asn	Val	Ser	Arg	Cys	Trp	Val	
241	Ala	Met	Thr	Pro	Thr	Val	Ala	Thr	Arg	Asp	Gly	Lys	Leu	Pro	Ala	Thr	
257	Gln	Leu	Arg	Arg	His	Ile	Asp	Leu	Leu	Val	Gly	Ser	Ala	Thr	Leu	Cys	
273	Ser	Ala	Leu	Tyr	Val	Gly	Asp	Leu	Cys	Gly	Ser	Val	Phe	Leu	Ile	Gly	
289	Gln	Leu	Phe	Thr	Phe	Ser	Pro	Arg	Arg	His	Trp	Thr	Thr	Gln	Gly	Cys	
305	Asn	Cys	Ser	Ile	Tyr	Pro	Gly	His	Ile	Thr	Gly	His	Arg	Met	Ala	Trp	
321	Asp	Met	Met	Met	Asn	Trp	Ser	Pro	Thr	Ala	Ala	Leu	Val	Met	Ala	Gln	
337	Leu	Leu	Arg	Ile	Pro	Gln	Ala	Ile	Leu	Asp	Met	Ile	Ala	Gly	Ala	His	
353	Trp	Gly	Val	Leu	Ala	Gly	Ile	Ala	Tyr	Phe	Ser	Met	Val	Gly	Asn	Trp	
369	Ala	Lys	Val	Leu	Val	Val	Leu	Leu	Leu	Phe	Ala	Gly	Val	Asp	Ala	Glu	
385	Thr	Ile	Val	Ser	Gly	Gly	Gln	Ala	Ala	Arg	Ala	Met	Ser	Gly	Leu	Val	
401	Ser	Leu	Phe	Thr	Pro	Gly	Ala	Lys	Gln	Asn	Ile	Gln	Leu	Ile	Asn	Thr	
417	Asn	Gly	Ser	Trp	His	Ile	Asn	Ser	Thr	Ala	Leu	Asn	Cys	Asn	Glu	Ser	
433	Leu	Asn	Thr	Gly	Trp	Leu	Ala	Gly	Leu	Ile	Tyr	Gln	His	Lys	Phe	Asn	
449	Ser	Ser	Gly	Cys	Pro	Glu	Arg	Leu	Ala	Ser	Cys	Arg	Pro	Leu	Thr	Asp	
465	Phe	Asp	Gln	Gly	Trp	Gly	Pro	Ile	Ser	Tyr	Ala	Asn	Gly	Ser	Gly	Pro	
481	Asp	Gln	Arg	Pro	Tyr	Cys	Trp	His	Tyr	Pro	Pro	Lys	Pro	Cys	Gly	Ile	
497	Val	Pro	Ala	Lys	Ser	Val	Cys	Gly	Pro	Val	Tyr	Cys	Phe	Thr	Pro	Ser	
513	Pro	Val	Val	Val	Gly	Thr	Thr	Asp	Arg	Ser	Gly	Ala	Pro	Thr	Tyr	Ser	
529	Trp	Gly	Glu	Asn	Asp	Thr	Asp	Val	Phe	Val	Leu	Asn	Asn	Thr	Arg	Pro	
545	Pro	Leu	Gly	Asn	Trp	Phe	Gly	Cys	Thr	Trp	Met	Asn	Ser	Thr	Gly	Phe	
561	Thr	Lys	Val	Cys	Gly	Ala	Pro	Pro	Cys	Val	Ile	Gly	Gly	Ala	Gly	Asn	
577	Asn	Thr	Leu	His	Cys	Pro	Thr	Asp	Cys	Phe	Arg	Lys	His	Pro	Asp	Ala	
593	Thr	Tyr	Ser	Arg	Cys	Gly	Ser	Gly	Pro	Trp	Ile	Thr	Pro	Arg	Cys	Leu	
609	Val	Asp	Tyr	Pro	Tyr	Arg	Leu	Trp	His	Tyr	Pro	Cys	Thr	Ile	Asn	Tyr	
625	Thr	Ile	Phe	Lys	Ile	Arg	Met	Tyr	Val	Gly	Gly	Val	Glu	His	Arg	Leu	
641	Glu	Ala	Ala	Cys	Asn	Trp	Thr	Arg	Gly	Glu	Arg	Cys	Asp	Leu	Glu	Asp	
657	Arg	Asp	Arg	Ser	Glu	Leu	Ser	Pro	Leu	Leu	Leu	Thr	Thr	Thr	Gln	Trp	
673	Gln	Val	Leu	Pro	Cys	Ser	Phe	Thr	Thr	Leu	Pro	Ala	Leu	Ser	Thr	Gly	
689	Leu	Ile	His	Leu	His	Gln	Asn	Ile	Val	Asp	Val	Gln	Tyr	Leu	Tyr	Gly	
705	Val	Gly	Ser	Ser	Ile	Ala	Ser	Trp	Ala	Ile	Lys	Trp	Glu	Tyr	Val	Val	

## FIG.1B

721	Leu	Leu	Phe	Leu	Leu	Leu	Ala	Asp	Ala	Arg	Val	Cys	Ser	Cys	Leu	Trp
737	Met	Met	Leu	Leu	Ile	Ser	Gln	Ala	Glu	Ala	Ala	Leu	Glu	Asn	Leu	Val
753	Ile	Leu	Asn	Ala	Ala	Ser	Leu	Ala	Gly	Thr	His	Gly	Leu	Val	Ser	Phe
769	Leu	Val	Phe	Phe	Cys	Phe	Ala	Trp	Tyr	Leu	Lys	Gly	Lys	Trp	Val	Pro
785	Gly	Ala	Val	Tyr	Thr	Phe	Tyr	Gly	Met	Trp	Pro	Leu	Leu	Leu	Leu	Leu
801	Leu	Ala	Leu	Pro	Gln	Arg	Ala	Tyr	Ala	Leu	Asp	Thr	Glu	Val	Ala	Ala
817	Ser	Cys	Gly	Gly	Val	Val	Leu	Val	Gly	Leu	Met	Ala	Leu	Thr	Leu	Ser
833	Pro	Tyr	Tyr	Lys	Arg	Tyr	Ile	Ser	Trp	Cys	Leu	Trp	Trp	Leu	Gln	Tyr
849	Phe	Leu	Thr	Arg	Val	Glu	Ala	Gln	Leu	His	Val	Trp	Ile	Pro	Pro	Leu
865	Asn	Val	Arg	Gly	Gly	Arg	Asp	Ala	Val	Ile	Leu	Leu	Met	Cys	Ala	Val
881	His	Pro	Thr	Leu	Val	Phe	Asp	Ile	Thr	Lys	Leu	Leu	Leu	Ala	Val	Phe
897	Gly	Pro	Leu	Trp	Ile	Leu	Asp	Ala	Ser	Leu	Leu	Lys	Val	Pro	Tyr	Phe
913	Val	Arg	Val	Gln	Gly	Leu	Leu	Arg	Phe	Cys	Ala	Leu	Ala	Arg	Lys	Met
929	Ile	Gly	Gly	His	Tyr	Val	Gln	Met	Val	Ile	Ile	Lys	Leu	Gly	Ala	Leu
945	Thr	Gly	Thr	Tyr	Val	Tyr	Asn	His	Leu	Thr	Pro	Leu	Arg	Asp	Trp	Ala
961	His	Asn	Gly	Leu	Arg	Asp	Leu	Ala	Val	Ala	Val	Glu	Pro	Val	Val	Phe
977	Ser	Gln	Met	Glu	Thr	Lys	Leu	Ile	Thr	Trp	Gly	Ala	Asp	Thr	Ala	Ala
993	Cys	Gly	Asp	Ile	Ile	Asn	Gly	Leu	Pro	Val	Ser	Ala	Arg	Arg	Gly	Arg
1009	Glu	Ile	Leu	Leu	Gly	Pro	Ala	Asp	Gly	Met	Val	Ser	Lys	Gly	Trp	Arg
1025	Leu	Leu	Ala	Pro	Ile	Thr	Ala	Tyr	Ala	Gln	Gln	Thr	Arg	Gly	Leu	Leu
1041	Gly	Cys	Ile	Ile	Thr	Ser	Leu	Thr	Gly	Arg	Asp	Lys	Asn	Gln	Val	Glu
1057	Gly	Glu	Val	Gln	Ile	Val	Ser	Thr	Ala	Ala	Gln	Thr	Phe	Leu	Ala	Thr
1073	Cys	Ile	Asn	Gly	Val	Cys	Trp	Thr	Val	Tyr	His	Gly	Ala	Gly	Thr	Arg
1089	Thr	Ile	Ala	Ser	Pro	Lys	Gly	Pro	Val	Ile	Gln	Met	Tyr	Thr	Asn	Val
1105	Asp	Gln	Asp	Leu	Val	Gly	Trp	Pro	Ala	Pro	Gln	Gly	Ser	Arg	Ser	Leu
1121	Thr	Pro	Cys	Thr	Cys	Gly	Ser	Ser	Asp	Leu	Tyr	Leu	Val	Thr	Arg	His
1137	Ala	Asp	Val	Ile	Pro	Val	Arg	Arg	Arg	Gly	Asp	Ser	Arg	Gly	Ser	Leu
1153	Leu	Ser	Pro	Arg	Pro	Ile	Ser	Tyr	Leu	Lys	Gly	Ser	Ser	Gly	Gly	Pro
1169	Leu	Leu	Cys	Pro	Ala	Gly	His	Ala	Val	Gly	Ile	Phe	Arg	Ala	Ala	Val
1185	Cys	Thr	Arg	Gly	Val	Ala	Lys	Ala	Val	Asp	Phe	Ile	Pro	Val	Glu	Asn
1201	Leu	Glu	Thr	Thr	Met	Arg	Ser	Pro	Val	Phe	Trp	Asp	Asn	Ser	Ser	Pro
1217	Pro	Val	Val	Pro	Gln	Ser	Phe	Gln	Val	Ala	His	Leu	His	Ala	Pro	Thr
1233	Gly	Ser	Gly	Lys	Ser	Thr	Lys	Val	Pro	Ala	Ala	Tyr	Ala	Ala	Gln	Gly
1249	Tyr	Lys	Val	Leu	Val	Leu	Asn	Pro	Ser	Val	Ala	Ala	Thr	Leu	Gly	Phe
1265	Gly	Ala	Tyr	Met	Ser	Lys	Ala	His	Gly	Ile	Asp	Pro	Asn	Ile	Arg	Thr
1281	Gly	Val	Arg	Thr	Ile	Thr	Thr	Gly	Ser	Pro	Ile	Thr	Tyr	Ser	Thr	Tyr
1297	Gly	Lys	Phe	Leu	Ala	Asp	Gly	Gly	Cys	Ser	Gly	Gly	Ala	Tyr	Asp	Ile
1313	Ile	Ile	Cys	Asp	Glu	Cys	His	Ser	Thr	Asp	Ala	Thr	Ser	Ile	Leu	Gly
1329	Ile	Gly	Thr	Val	Leu	Asp	Gln	Ala	Glu	Thr	Ala	Gly	Ala	Arg	Leu	Val
1345	Val	Leu	Ala	Thr	Ala	Thr	Pro	Pro	Gly	Ser	Val	Thr	Val	Pro	His	Pro
1361	Asn	Ile	Glu	Glu	Val	Ala	Leu	Ser	Thr	Thr	Gly	Glu	Ile	Pro	Phe	Tyr
1377	Gly	Lys	Ala	Ile	Pro	Leu	Glu	Val	Ile	Lys	Gly	Gly	Arg	His	Leu	Ile
1393	Phe	Cys	His	Ser	Lys	Lys	Lys	Cys	Asp	Glu	Leu	Ala	Ala	Lys	Leu	Val
1409	Ala	Leu	Gly	Ile	Asn	Ala	Val	Ala	Tyr	Tyr	Arg	Gly	Leu	Asp	Val	Ser
1425	Val	Ile	Pro	Thr	Ser	Gly	Asp	Val	Val	Val	Val	Ala	Thr	Asp	Ala	Leu

## FIG.1C

1441 Met Thr Gly Tyr Thr Gly Asp Phe Asp Ser Val Ile Asp Cys Asn Thr  
1457 Cys Val Thr Gln Thr Val Asp Phe Ser Leu Asp Pro Thr Phe Thr Ile  
1473 Glu Thr Ile Thr Leu Pro Gln Asp Ala Val Ser Arg Thr Gln Arg Arg  
1489 Gly Arg Thr Gly Arg Gly Lys Pro Gly Ile Tyr Arg Phe Val Ala Pro  
1505 Gly Glu Arg Pro Ser Gly Met Phe Asp Ser Ser Val Leu Cys Glu Cys  
1521 Tyr Asp Ala Gly Cys Ala Trp Tyr Glu Leu Thr Pro Ala Glu Thr Thr  
1537 Val Arg Leu Arg Ala Tyr Met Asn Thr Pro Gly Leu Pro Val Cys Gln  
1553 Asp His Leu Glu Phe Trp Glu Gly Val Phe Thr Gly Leu Thr His Ile  
1569 Asp Ala His Phe Leu Ser Gln Thr Lys Gly Ser Gly Glu Asn Leu Pro  
1585 Tyr Leu Val Ala Tyr Gln Ala Thr Val Cys Ala Arg Ala Gln Ala Pro  
1601 Pro Pro Ser Trp Asp Gln Met Trp Lys Cys Leu Ile Arg Leu Lys Pro  
1617 Thr Leu His Gly Pro Thr Pro Leu Leu Tyr Arg Leu Gly Ala Val Gln  
1633 Asn Glu Ile Thr Leu Thr His Pro Val Thr Lys Tyr Ile Met Thr Cys  
1649 Met Ser Ala Asp Leu Glu Val Val Thr Ser Thr Trp Val Leu Val Gly  
1665 Gly Val Leu Ala Ala Leu Ala Ala Tyr Cys Leu Ser Thr Gly Cys Val  
1681 Val Ile Val Gly Arg Val Val Leu Ser Gly Lys Pro Ala Ile Ile Pro  
1697 Asp Arg Glu Val Leu Tyr Arg Glu Phe Asp Glu Met Glu Glu Cys Ser  
1713 Gln His Leu Pro Tyr Ile Glu Gln Gly Met Met Leu Ala Glu Gln Phe  
1729 Lys Gln Lys Ala Leu Gly Leu Leu Gln Thr Ala Ser Arg Gln Ala Glu  
1745 Val Ile Ala Pro Ala Val Gln Thr Asn Trp Gln Lys Leu Glu Thr Phe  
1761 Trp Ala Lys His Met Trp Asn Phe Ile Ser Gly Ile Gln Tyr Leu Ala  
1777 Gly Leu Ser Thr Leu Pro Gly Asn Pro Ala Ile Ala Ser Leu Met Ala  
1793 Phe Thr Ala Ala Val Thr Ser Pro Leu Thr Thr Ser Gln Thr Leu Leu  
1809 Phe Asn Ile Leu Gly Gly Trp Val Ala Ala Gln Leu Ala Ala Pro Gly  
1825 Ala Ala Thr Ala Phe Val Gly Ala Gly Leu Ala Gly Ala Ala Ile Gly  
1841 Ser Val Gly Leu Gly Lys Val Leu Ile Asp Ile Leu Ala Gly Tyr Gly  
1857 Ala Gly Val Ala Gly Ala Leu Val Ala Phe Lys Ile Met Ser Gly Glu  
1873 Val Pro Ser Thr Glu Asp Leu Val Asn Leu Leu Pro Ala Ile Leu Ser  
1889 Pro Gly Ala Leu Val Val Gly Val Val Cys Ala Ala Ile Leu Arg Arg  
1905 His Val Gly Pro Gly Glu Gly Ala Val Gln Trp Met Asn Arg Leu Ile  
1921 Ala Phe Ala Ser Arg Gly Asn His Val Ser Pro Thr His Tyr Val Pro  
1937 Glu Ser Asp Ala Ala Ala Arg Val Thr Ala Ile Leu Ser Ser Leu Thr  
1953 Val Thr Gln Leu Leu Arg Arg Leu His Gln Trp Ile Ser Ser Glu Cys  
1969 Thr Thr Pro Cys Ser Gly Ser Trp Leu Arg Asp Ile Trp Asp Trp Ile  
1985 Cys Glu Val Leu Ser Asp Phe Lys Thr Trp Leu Lys Ala Lys Leu Met  
2001 Pro Gln Leu Pro Gly Ile Pro Phe Val Ser Cys Gln Arg Gly Tyr Lys  
2017 Gly Val Trp Arg Val Asp Gly Ile Met His Thr Arg Cys His Cys Gly  
2033 Ala Glu Ile Thr Gly His Val Lys Asn Gly Thr Met Arg Ile Val Gly  
2049 Pro Arg Thr Cys Arg Asn Met Trp Ser Gly Thr Phe Pro Ile Asn Ala  
2065 Tyr Thr Thr Gly Pro Cys Thr Arg Leu Pro Ala Pro Asn Tyr Thr Phe  
2081 Ala Leu Trp Arg Val Ser Ala Glu Glu Tyr Val Glu Ile Arg Gln Val  
2097 Gly Asp Phe His Tyr Val Thr Gly Met Thr Thr Asp Asn Leu Lys Cys  
2113 Pro Cys Gln Val Pro Ser Pro Glu Phe Phe Thr Glu Leu Asp Gly Val  
2129 Arg Leu His Arg Phe Ala Pro Pro Cys Lys Pro Leu Leu Arg Glu Glu  
2145 Val Ser Phe Arg Val Gly Leu His Glu Tyr Pro Val Gly Ser Gln Leu

## FIG.1D

2161 Pro Cys Glu Pro Glu Pro Asp Val Ala Val Leu Thr Ser Met Leu Thr  
2177 Asp Pro Ser His Ile Thr Ala Glu Ala Ala Gly Arg Arg Leu Ala Arg  
2193 Gly Ser Pro Pro Ser Val Ala Ser Ser Ser Ala Ser Gln Leu Ser Ala  
2209 Pro Ser Leu Lys Ala Thr Cys Thr Ala Asn His Asp Ser Pro Asp Ala  
2225 Glu Leu Ile Glu Ala Asn Leu Leu Trp Arg Gln Glu Met Gly Gly Asn  
2241 Ile Thr Arg Val Glu Ser Glu Asn Lys Val Val Ile Leu Asp Ser Phe  
2257 Asp Pro Leu Val Ala Glu Glu Asp Glu Arg Glu Ile Ser Val Pro Ala  
2273 Glu Ile Leu Arg Lys Ser Arg Arg Phe Ala Gln Ala Leu Pro Val Trp  
2289 Ala Arg Pro Asp Tyr Asn Pro Pro Leu Val Glu Thr Trp Lys Lys Pro  
2305 Asp Tyr Glu Pro Pro Val Val His Gly Cys Pro Leu Pro Pro Pro Lys  
2321 Ser Pro Pro Val Pro Pro Pro Arg Lys Lys Arg Thr Val Val Leu Thr  
2337 Glu Ser Thr Leu Ser Thr Ala Leu Ala Glu Leu Ala Thr Arg Ser Phe  
2353 Gly Ser Ser Ser Thr Ser Gly Ile Thr Gly Asp Asn Thr Thr Thr Ser  
2369 Ser Glu Pro Ala Pro Ser Gly Cys Pro Pro Asp Ser Asp Ala Glu Ser  
2385 Tyr Ser Ser Met Pro Pro Leu Glu Gly Glu Pro Gly Asp Pro Asp Leu  
2401 Ser Asp Gly Ser Trp Ser Thr Val Ser Ser Glu Ala Asn Ala Glu Asp  
2417 Val Val Cys Cys Ser Met Ser Tyr Ser Trp Thr Gly Ala Cys Val Thr  
2433 Pro Cys Ala Ala Glu Glu Gln Lys Leu Pro Ile Asn Ala Leu Ser Asn  
2449 Ser Leu Leu Arg His His Asn Leu Val Tyr Ser Thr Thr Ser Arg Ser  
2465 Ala Cys Gln Arg Gln Lys Lys Val Thr Phe Asp Arg Leu Gln Val Leu  
2481 Asp Ser His Tyr Gln Asp Val Leu Lys Glu Val Lys Ala Ala Ala Ser  
2497 Lys Val Lys Ala Asn Leu Leu Ser Val Glu Glu Ala Cys Ser Leu Thr  
2513 Pro Pro His Ser Ala Lys Ser Lys Phe Gly Tyr Gly Ala Lys Asp Val  
2529 Arg Cys His Ala Arg Lys Ala Val Thr His Ile Asn Ser Val Trp Lys  
2545 Asp Leu Leu Glu Asp Asn Val Thr Pro Ile Asp Thr Thr Ile Met Ala  
2561 Lys Asn Glu Val Phe Cys Val Gln Pro Glu Lys Gly Gly Arg Lys Pro  
2577 Ala Arg Leu Ile Val Phe Pro Asp Leu Gly Val Arg Val Cys Glu Lys  
2593 Met Ala Leu Tyr Asp Val Val Thr Lys Leu Pro Leu Ala Val Met Gly  
2609 Ser Ser Tyr Gly Phe Gln Tyr Ser Pro Gly Gln Arg Val Glu Phe Leu  
2625 Val Gln Ala Trp Lys Ser Lys Lys Thr Pro Met Gly Phe Ser Tyr Asp  
2641 Thr Arg Cys Phe Asp Ser Thr Val Thr Glu Ser Asp Ile Arg Thr Glu  
2657 Glu Ala Ile Tyr Gln Cys Cys Asp Leu Asp Pro Gln Ala Arg Val Ala  
2673 Ile Lys Ser Leu Thr Glu Arg Leu Tyr Val Gly Gly Pro Leu Thr Asn  
2689 Ser Arg Gly Glu Asn Cys Gly Tyr Arg Arg Cys Arg Ala Ser Gly Val  
2705 Leu Thr Thr Ser Cys Gly Asn Thr Leu Thr Cys Tyr Ile Lys Ala Arg  
2721 Ala Ala Cys Arg Ala Ala Gly Leu Gln Asp Cys Thr Met Leu Val Cys  
2737 Gly Asp Asp Leu Val Val Ile Cys Glu Ser Ala Gly Val Gln Glu Asp  
2753 Ala Ala Ser Leu Arg Ala Phe Thr Glu Ala Met Thr Arg Tyr Ser Ala  
2769 Pro Pro Gly Asp Pro Pro Gln Pro Glu Tyr Asp Leu Glu Leu Ile Thr  
2785 Ser Cys Ser Ser Asn Val Ser Val Ala His Asp Gly Ala Gly Lys Arg  
2801 Val Tyr Tyr Leu Thr Arg Asp Pro Thr Thr Pro Leu Ala Arg Ala Ala  
2817 Trp Glu Thr Ala Arg His Thr Pro Val Asn Ser Trp Leu Gly Asn Ile  
2833 Ile Met Phe Ala Pro Thr Leu Trp Ala Arg Met Ile Leu Met Thr His  
2849 Phe Phe Ser Val Leu Ile Ala Arg Asp Gln Leu Glu Gln Ala Leu Asp  
2865 Cys Glu Ile Tyr Gly Ala Cys Tyr Ser Ile Glu Pro Leu Asp Leu Pro  
2881 Pro Ile Ile Gln Arg Leu Gly Cys Pro Glu Arg Leu Ala Ser